NEWINGTON CONSERVATION COMMISSION

February 14, 2013

Special Meeting

I. CALL TO ORDER

Chairman Block called the Special Meeting of the Newington Conservation Commission meeting to order at 7:04 p.m.

II. ROLL CALL

In attendance:

Philip Block, Chairman
John Igielski, Secretary
Jeffrey Zelek, Vice-Chairman
Andreas Sadil, Member (7:05)
Kathleen Clark, Member
Philip Shapiro, Member (7:15)
Alan Paskevich, Alternate sitting for the vacant position

Peter Arburr, Chris Greenlaw, Town Engineer, Peter Boorman, Town Attorney.

III. ACCEPTANCE OF MINUTES

Commissioner Igielski moved to accept the minutes of the January 31, 2013 meeting. The motion was seconded by Commissioner Zelek. The vote was unanimously in favor of the motion with six voting YES.

Commissioner Paskevich moved to table the minutes of the February 5th and February 7th minutes. The motion was seconded by Commissioner Igielski.

IV. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

Each speaker limited to 2 minutes

None

V. OLD BUSINESS

A. Application 2012-22 Russell Road North of Old Highway

Chairman Block: One thing, we have been given all of the documentation and Chris has been so good as to give us an index if you will, and therefore when we're making our comments, I'd like to request that everybody refer to the item number as to whatever they are referring to out of this massive documentation that we have. I have been trying to go through my bags of material and to be quite honest, I find it rather daunting because between everything that we have and what has been supplanted by more recent changes to the application, it's really going to be very important to be able to hone in on what it is, in this mass of material that's still relevant and still supports your argument and concerns. I think I am allowed for the record to make reference to the notes that I generated for myself concerning my interpretation from the minutes and if you have different items from your review of the minutes and other documentation it would be helpful if you would all add them, so we can all find and hone in on those concerns as we discussed

them. Having said that, is there anybody who has anything that they want to deal with on the blasting, or can we go onto the next issue.

Chris Greenlaw: I would recommend at this time, since the last meeting I am still compiling all the Commissioner's remarks as conditions, as well as some of the information that I went over with you Mr. Chairman, so perhaps at the next meeting I could offer that to the Commission as proposed conditions at that time.

Chairman Block: Yeah, that's going to be down the road a bit when we have them all and you find the language that is going to be used and hone it down and make sure it's exactly what we want. Among the things that I had lost track of, the next three of the four issues that we are going to be discussing I think it was the water budget, am I correct on that? And if so, given the fact of the recent documentation that we were given and the testimony at the last part of the presentations by the applicant and our experts, is there any, what further issues remain as to the balancing of the water, pre and post project? What are your concerns?

Commissioner Clark: My concern is that in trying to define whether ground water should be considered, and whether Dr. Abrams and Mr. Slayback ever came on board accepting the fact that ground water could be an issue.

Chairman Block: Again, I'm going to give you my two cents worth for reviewing the testimony as I read it, and it's, I'm not saying that I am right, I'm only saying that this is my level of understanding at this point. I want to hear from you, but theoretically there is a consensus that there was the three strata, there is the soil runoff, there is the runoff between the interface between the soil and the bedrock, and there are fissures in the shallow part of the bedrock that may or may not contribute. In this particular instance, with this bedrock material I read that they said that the amount through the rock contribution was very minor, and nobody could quantify it by fraction or any other degree of balance. I also, from my own perspective is that the change of elevation between the watersheds is not high enough that this could not be a significant factor, but please, what are your thoughts?

Commissioner Clark: I'm using Mr. Bachand's facts, I thought that he presented himself as a knowledgeable person (inaudible) and thought that the presentation that he gave us, which included pictures showed that there was water clearly flowing through and, (inaudible) that showed height of the ground water, not necessarily surface water and that made sense to me at the time, and it seems that the ground water is something that all the experts agree that, and I think that to say that it is not there, or is minimal, is not the way to interpret what we have seen.

Chairman Block: Mr. Bachand did a yeoman's service to the project in the fact that he forced the applicant and the expert, to my mind, to look into this issue. If you recall his testimony, and I'm only playing devil's advocate, he was talking about an out flowing that was a source to wetlands number one. There is no dispute that the run off from the ridge line down to one, with the amount of soil that is involved created, if you will, a spring affect feeding one. What he was not able to prove, if you will, is how much of that contribution was going through the bedrock as against coming down the surface of the bedrock under the soil, which is the same that the others thought about as well. In any event, that contribution to one, like you said before, in my mind is geometrically different than the watershed areas of either three or two where you don't have that long hillside to feed it.

Commissioner Clark: The picture that he drew, demonstrated that ground water, can I draw a picture…..

Chairman Block: No, he did a cross hatch.

Commissioner Clark: But what he drew, and explained to you, you interpret it that way, I interpret it that this is like a tray, this is the top of the, if you want to call it the continental divide, where the water shed divides, goes down one side, goes down the other side. Because several experts say that the rock underneath is fractured basalt which can have fissures that can go in any kind of random direction, therefore if you are talking about ground water, water that moves through the rock, the point that Mr. Bachand was making was that it does not follow the surface water. So this continental divide, instead of starting up here, and surface water would go here, and surface water would go there, ground water can go almost like, I think of it like a game of pinball, and that's how I interpreted the picture that he showed us, to show that the ground water could be feeding wetland two.

Chairman Block: Okay. Now, in your pinball analysis, the one common facture, wherever that ball is going to bounce is gravity, except of course, flippers and we don't have any flippers here. Between two and one, you are absolutely right, but the wetlands of concern in this particular is two, and perhaps three, and there isn't, and again, please tell me if I'm wrong, there isn't any appreciable upland area of significant elevation to really generate that amount of water. The area is, given your hypothesis, we're talking about under the latest consideration, Lots 43, 35 and 34 and maybe 33. These are the only, if you will, upland lots of significance to wetlands two.

Commissioner Clark: Aren't these lines (inaudible)

Chairman Block: Not closer, they are just common levels of elevation. You would have to, and I know it's almost impossible, perhaps Chris can help us, but the bottom line area is that of course the watershed lines are marked and I dare say, between the center part of two, and the highest part of the watershed on the perimeter, I don't know, is it thirty feet of distance, Chris?

Chris Greenlaw: The one that you are referring to, there is a lot of acreage there. So probably you should point to a specific line on the map and reference a section. I have a comment when you finish with this plan here, and would point you and the Commissioners to some of the expert testimony.

Chairman Block: Please do.

Chris Greenlaw: Starting if you will, and again, please feel free if you want to explore that route, what I would suggest, we could recess, I could get a map, we could point to that map, there's only about seventy-three acres, so when you start hypothetically talking about where a ridge is, or anything else, we could point to that map and explore that, but while we're here, understanding that we were going to talk about this, I just wanted to bring to light some of the testimony from the experts. I go back to the night of the 22nd, and the expert for the developer did make one comment on page 21, it was Russ Slayback and he says for the record, first we do not know the precise limits of the subsurface watershed however it is generally regarded in Connecticut and in topography of this nature that within a few (inaudible) of feet, the boundary line between the surface watershed and the subsurface watershed is essentially the same, and in any given watershed on one side there might be plusses and then minuses, but the total area would not be expected, and it says inaudible, but I think, I would ask you to go back and look at some of the testimony, and I will certainly bring up the maps because there was a lot of talk about wetland area two, when you have a large area, given your ability to utilize software, whatever methodology you are utilizing to determine that area, there was talk whether the area was 12.95 or 13. 01, certainly within the scale of the map you are going to get those differences, and I think that was understood, but the concept here is, we have some testimony from one of the experts, our expert provided a chart on the 22nd, and his rebuttal was, he took, he developed this graph, and this graph was very similar to the graph that was produced by the consultant, and what this

graph is demonstrating is that as existing and proposed conditions over the course of the year, it's the water budget, and it's showing proposed conditions versus existing conditions. What I was going to offer as well is that this is derived from data, which I have in my office from the consultant, and he has this labeled as acre feet of storage for each month. This is rain fall and he doesn't have the units marked on here, but what they are doing is, they have the cumulative amount for the year, given month by month. The existing versus proposed. This is in concert with the data that was provided, he's responding to the data that was provided, that I'll show you from the consultant, and I believe…..

Commissioner Sadil: Acre feet storage?

Chris Greenlaw: Right, the volume of water that is going to go to wetland two, and what they are doing is…..

Commissioner Sadil: This is rainfall, strictly rainfall.

Chris Greenlaw: No, and that is what I want to get for you, because I believe that was a question that you had, and our expert is, in this time, in review of the data that was provided by the developer's consultant. That graph I will bring and provide to you and you will see that these are very similar. The testimony from Logan is involved on the following pages from the 22nd on page 34 and he starts talking about how close they are with the watersheds and the area that contributes. In addition to his testimony, he produced this chart. I would like to bring forward, is the area maps that are contributing to wetland area two and wetland area three and in addition to that there is both the acre feet storage, the plotting of water, and at this time, on the 22nd, I don't want to do all the homework for you, but we, when you look through the testimony I think you are going to see that wetland area two they are very close and he is in agreement with Mr. Logan, with our consultant, but he makes a statement that he wants to further explore wetland area three and he wants more water. That was a condition or a comment that we made to them because roughly 2.26 acres with a road leaving, they had to make up for that, and that's something that if took a recess I could certainly go back to the office and provide it to you. But, look through this document yourself, perhaps you want to re-read this and re-visit this for the next meeting. Go back, look at what the consultant provided, read what our expert found, I think you'll find wetland area two at this time he is stating that the volume of water for this area, I want to speak to the data though, this whole acreage footage, the consultant provided a document that had rainfall. How do we get this water, and the data that they submitted has rainfall, and it has an estimated amount of ground water, it has evapotranspiration, so they take this, over the course of the year, the plusses, the minuses, and they come up with this cumulative pre and post analysis and what they try to demonstrate that in the end we would have equal or more, and that's why there was so much talk about the areas because Logan was trying to get the consultant to make sure that any time that they cut through a watershed and took water to the road, that they had to make up for it with the yard drains that went to the bio-retention areas, and then those bio-retention area were proposed to infuse water back into the subsoil, the ground water component and back into the wetland, and again, I will absolutely bring a map up so that we have an illustration as we read this testimony.

Commissioner Sadil: Two questions, what is the average, is this a five year average, or just the past year.

Chris Greenlaw: It's in the data, the data from the consultant, he took a range, don't quote me on this but like from 1974 to 2005 and then he took another period, there's some testimony in here where the consultant talks about the dry years and the period of the dry years, and what was built into that, and our expert was in review of that, and that sheet, I'll make copies of it for everybody so you can review it.

Commissioner Sadil: Now my next question is how do you break out rainwater, surface, versus ground water? Do you have a break down, sixty forty, fifty, fifty, it's interesting how he comes to that.

Chris Greenlaw: That's an excellent question, and I might learn something myself. Mr. Slayback, in the testimony in here he makes comment to the amount of water that gets translated from rainwater into ground water specifically for the type of material we have on the site there. He talks about it in a generalized sense, and he talks about it in a specific sense, he entered that into the testimony, and he, and that is reported.

Attorney Boorman: Mr. Chairman, just for the record, Mr. Bachand has not been identified as an expert. He is a member of the public who has come in with whatever knowledge he has and he has indicated to us, in both his verbal and his written communications what that is, so you can certainly give him the credence you want, but he has not been identified as an expert.

Chairman Block: Again, the bottom line, as I understand it, is that the data that they have shows that they match the water budget of what is there and what is going to be there. Our experts conceded that that is as good as they can get, he has no issues with the graphing that he came up with. Again, it's good to point out, Slayback using my vernacular, says that the portion that would be traveling through the lower basalt rock, was a very minor faction. Presumably, I don't know if the change that might occur that's not documented is going to be significant enough to alter the flow that is drafted, that has been presented which they agreed to, so the question, the way that I pose it is, are we, in considering that lack of data on the rock flow, are we talking about two percent of the flow contributing to the wetlands, five percent, certainly if it reached anywhere near ten percent I think somebody would had said something more about it. But they haven't given us a number, the numbers that they have given us match, and both of them agree. So, I, again, I just don't have anything to argue about that.

Commissioner Igielski: Just want to make a point of information, and that is the water budget for wetland three although it shows basically equal before and after, based on the Commission's request of the Chair, to add additional flow into wetland three, and I recall the applicant agreeing that that was something they could do by simply picking up additional square footage and feed it into that wetland.

Chris Greenlaw: More specifically Mr. Chair, to Commissioner Igielski's remark, that's January 24, page 24, water budget wetland area number three, Mr. Logan goes on to say, for instance we talked about the water budget for wetland three and in our memo that we recommended yesterday that they try to increase the water in the order of ten to fifteen percent across the board. And he said, it didn't happen, so he recommends, I'll read verbatim, I think they are a little shy in the spring, a little more later in the spring and early summer again. That could be within a margin of error in the calculations but I'm sure that, and that would be my recommendation, that they try to maybe draft some more water, maybe some from Lot #8 could get in there, maybe they could pick one of these or other lots also and head it that way. And just so the Commission knows, I have already asked the consultant to follow up on that matter, and to look at, per the recommendation of our expert to increase the water to wetland area three. Again, I'll go and get that map, that was the map that showed the contributing areas, but that was the recommendation from again, our expert.

Chairman Block: If that may be the case, perhaps then we can make a note that that would be a condition that we would want to review and if at the time that we are talking about the condition, Chris has information to update it, which may or may not make that condition irreverent, that condition relevant, then we could know whether or not it is resolved. I don't want to muddy the waters with new information that is outside our deliberations while we are in this period of time.

Commissioner Sadil: When you are making the distinction between the ground water and the surface water, so we can take equal credit if they rearrange the lots, you can, in both ways, how do you adjust both for the increase of ground water or the increase of surface water, handle it the same way by equally, how is that handled, how do you increase, how do you decrease?

Chris Greenlaw: To answer your question directly, no. There's a ground water component, I'm going to find that testimony from the experts explaining the percentage of ground water and the reduction of the surface water that coincides with it. But directly in this, when you read on, it's also directly recommended by our experts that they just grab the surface water and knowing the surface water, let's say, for a matter of speaking, that 85 percent of that water that is going to get to that wetland area, he was looking for a quick land grab, make sure it was treated and get it to the wetland area three. Maybe not that elaborately, but he was looking for surface knowing that when you grab that area of surface you grab 85 percent, just from the surface flow calculations, because it is quite elaborate as you say. To add just a sliver of surface water to the pie, versus going back and readjusting all those calculations, the water (inaudible) component of the ground water, it's much easier just to grab the surface water, run it through a bio-swale, or bio-retention, increase the size of bio-retention and then infuse it back into that wetland area, so at this time, when you read through, I thought I just read that to you, they are looking for, they are looking at this as, the fastest way to do this is to increase this and look at possibly Lot #8, I don't think it will be Lot #8, because I've looked at that and I don't want to get into specifics….

Commissioner Sadil: I'm more interested in wetland two, specifically, and then wetland three.

Chris Greenlaw: Yeah, and again, perhaps after we take a recess later, when I bring the documentation up and you look through the testimony as it relates to wetland two, you are going to find that Logan is satisfied with the area that contributes to wetland area two, and I think it's going to be representative of this graph that Logan provided to us on the 27th.

Chairman Block: Let me give you my take on that. The difference between the surface water runoff and the bedrock flow is that the deep cuts, the trenches, cutting through the bedrock, that could be detrimental to what is there now, because they collect the water and take it somewhere else. The surface water of course is amiable to re-grading, and piping and other things and that is why they, to my understanding, if there was any alteration to the bedrock flow via their trenches, they replaced it with surface water by adding to the watershed.

Commissioner Sadil: In the REMA report, on pages 36 and 37, where they talk about flashing, more water into the wetlands can be bad because that would inhibit certain characteristics from re-producing in the wetland, it could be over flooded. Certain trees could fall over, some plants, the roots could not take any more water, seeds and such, more water could be bad.

Chairman Block: The flashing refers to the sudden onslaught. With the design to the bio-swales, and the other detention areas and so on that they have created, according to Logan, he was satisfied that the way that the flow was going to be generated was acceptable and beneficial.

Chris Greenlaw: I have some more on that. Again, the minutes of the 24th, page 35, second paragraph, in regards to what you just said, and again this follows what I just read about Logan expressing some interest in grabbing more water for wetland three. This will answer your question in general about the water. It says, Attorney Boorman asks, what percentage do you have now? George Logan, I'm not sure, I didn't calculate percentage, but looking at the graphs, those are the graphs that I'm talking about, the balance, they are equal, but a little higher in the spring, and (inaudible)or, the other way around, a little lower in the spring and higher in the summer. I think a little more water there might not be a bad idea. Page 34, Second paragraph, because he is trying to grab water for three, because he thinks three is deficient.

Attorney Boorman: It is page 35. Just by way of directive, thinking of the physical characteristics here, and rightly so, in terms of the water budget, but you have the experts from both sides telling you that that issue, they both are on agreement on. They went through from what you are reading in the REMA report initially, which was a totally different design, to comments that were made on the 22nd by Mr. Logan which indicated that he did not have that much time to look at everything, but he needed some additional time so two days later, on the 24th, starting on page 35 he does go through and confirms the fact that his numbers are now lined up with the numbers that came out from the applicant.

Chris Greenlaw: I want to remind you at this time Mr. Chair that Mr. Logan goes on to offer, and I believe the intent was to offer, if you remember this chart here, and I think you had questions on this before and what he does at this point, is he offers this as possible conditions, what sureties do you have? There is testimony to back this up. He offers at this time to have, he put together this plan, and it demonstrates sampling stations for shallow ground water, surface flow sampling stations, storm water sampling stations, so when you read the testimony, it's recommended for water quality, base line, meaning before construction starts, as construction is continuing and then he recommends I believe for five years to continue doing this, and he offers this as a form of a potential condition such that you can monitor, and he mentions in the reports, and I read this from the 23rd and 24th, the handouts that he gave, he mentions about I believe piezometers to measure the amount of ground water that you have, he mentions surface flow sampling stations, and so therefore as a series of conditions that I have passed those out to you, when I read this, that's why I offered you that condition, because it is in concert with what he is recommending, that if this does fly, and you do have conditions, he is recommending that such, that you have controls. You have controls that monitor, you're going to require an expert that is going to analyze that and request recommendations, so please refer back to this and to the two reports he has from the 23rd and the 24th, in addition to the testimony.

Commissioner Paskewich: I have a question just for that to Chairman Block. At what point in these proceedings would we be able to request those conditions?

Chairman Block: Right now we are discussing whether or not you would like to create a condition, in any given area, and at the end of this session, I would hope that we would have roughed out what ever conditions there would be to the water budget. You know, if you deem it necessary.

Commissioner Paskewich: Then we would be able to proceed with that by the end of the meeting?

Chairman Block: Absolutely.

Commissioner Paskewich: Discuss the conditions, and try to put them into writing….

Attorney Boorman: May I suggest that we use the procedure that we've used at the last meetings, we can spell things out for Chris, he can take the notes on it, he can go back and put them into the correct language, with the idea that all of those conditions will be presented back to you, and then you will absolutely be able to look at the words, and determine if you want that.

Chris Greenlaw: Commissioners, if you will, reflect back to the current conditions that I have, and these are conditions that you all, I listen to what you are saying, I keep adding to this, and the conditions that I gave to you last time, there is one whole section on, that I call condition F, and there are eight or nine things, sub-parts. This is called the water quality sampling program, and I built this on the recommendation of our expert. One of the things that I do directly is that I go down as far as, records of water depth gage, shallow ground water sampling shall be conducted

within the recommendations and outline per the REMA report, with the date, so I'm specifically stating to the point of what our expert has recommended, so please feel free to read through these conditions, read through the report, add to this, make revisions, as you deem necessary as controls or conditions. If you need an extra copy, I will certainly give you an extra copy of the current conditions.

Attorney Boorman: One thing that I've heard the Commission say they wanted to consider for number three whether they wanted the condition in there, our expert (inaudible) take a notation on that and add to your list, Lot #8 was it?

Chris Greenlaw: That has already been conveyed to the consultant, and they are working on it currently.

Attorney Boorman: Well, we are talking about conditions, so you have for your notes the conditions from Mr. Logan

Commissioner Clark: Can I ask a general question? Are we able, or not able to consider any correspondence brought in by the public. Some of the public brought in comments from environmental groups. Can we consider those?

Attorney Boorman: Anything that is in the record you can consider but remember when we are talking about those matters that have to do with physical characteristics of the wetlands, that must be substantiated by expert opinion, and the expert opinion must be grounded in our application. So periodicals, or general information if you will, does not necessarily carry the weight that an expert's testimony for example on this issue so I would say if you have issues along those lines, certainly you can formulate part of your decision making in any given area, and for the whole application as well. But I would say to you, that when it comes time to state reasons on the record, your reasons on the record must be grounded in those areas of physical characteristics must be grounded in expert testimony and presentations as given to you, as a rational basis for following what it is that the experts testify to.

Commissioner Clark: In general statements, I'm referring to (inaudible) communicating with John Bachand, and the comment about how the water flows through the cracks in the bedrock, and how it doesn't follow the path of the surface water, and I'm just being educated….

Attorney Boorman: I would suggest to you that what I'm hearing specifically from what you just read, that could be part of the concertration to you, and it's part of the record, but I would suggest to you that that is not expert testimony that is associated with this project. In terms of meeting the burden that is required by the applicant's expert testimony, it has to be contradicted by expert testimony that is provided to you specifically for this project. So what I would say is that it can be part and parcel of your analysis, but you need more.

Chairman Block: Again, if I can offer, Peter, tell me if I'm wrong on this, that type of a publication which, as you said, you certainly can look at it and think about it, but that's a generalization and whatever it says in there, you have to interpret that in regard to the specifics of our project. You know, there is a term in philosophy of taking a general and applying it to a specific, you know, it may or may not fit, so in general that type of a public article has meat to it, but whether or not that meat is applicable to us is something that you and I and the rest of the Commission has to try and understand.

Attorney Boorman: Let me just expand on that a little bit more. Not only would that have to be identified as a potential issue by an expert, but the harm to our specific issue would have to be

identified too, and that harm would have to be spelled out in terms of our wetlands and our situation, and have to be in the record someplace.

Chairman Block: Again, not to beat a horse, but the one part that I am having trouble with, that aside from being specific was, the harm I think would have to be substantial.

Attorney Boorman: That is the requirement under case law, it would have to be substantial. I cannot be mere speculations, likely is the word that we used before, and it has to be substantial. We talked about that in part in the educational material.

Chairman Block: With that Alan, I'd just like to, what is the gist of the condition that you are contemplating?

Commissioner Paskewich: The one that, the monitoring system recommended by Logan and the systems and procedure of systems……

Chairman Block: To monitor the water budget over a period of years?

Commissioner Paskewich: Yes.

Chairman Block: Okay.

Commissioner Zelek: I don't think it's only the water budget, it's also measuring the species and (inaudible)

Attorney Boorman: If I may for a minute, if you are going to go in that direction, and I know that there has been some chagrin about this type of issue once we get to the animals if you will, did you go back and look at the testimony and confirm especially what Mr. Logan said relative to that, and read the whole thing where he makes his conclusions too. In essence, I think you will find that his conclusions, although he charts this out, he used the term, for ecological purposes, and then when he is pinned down on the physical characteristics aspect of that, he essentially says that there is no way that he can, he uses these words, no, I can't ascertain that there is any complications to the physical characteristics of the wetlands in terms of that. I would say that is a good area to look at, but if you are going to go in that direction for a condition, I would say read that carefully, and then try to formulate what it is you want to do for a condition.

Chairman Block: Again, as we have been doing, as Chris has done, and certainly I would like to, I'll tell you that right off the bat, to afford whatever protection we can to the ecological balance of the area, but we have to be able to site chapter and verse in our record in order to be able to accomplish that.

Commissioner Zelek: The minutes from the 24th, Mr. Slayback, I just want to tell you, issues with the monitoring, we've covered the water sampling pretty well, is there any (inaudible) and then Sigrun responded we did very much the same thing, egg mass counts and the larvae counts, and so to me, they were referring, in addition to the water sampling, the species.

Chairman Block: In that section, if you look at page 41, she also says, it's her opinion that the impacts on the salamanders will have impact on the wetlands. Again, you would have to go into the rest of the documentation on the record and try and build on that as to what exactly and how and so on.

Commissioner Zelek: (Inaudible) a little bit of a gap between what Mr. Logan was saying and what Sigrun was saying, they had a little bit of disagreement, (inaudible)

Chairman Block: Well, to be quite honest if we are going to go in that direction, I would wait, weave, if you will, a tapestry of concern over the salamanders and the swamp cottonwoods and the control of invasives, in order to make sure that the physical characteristics of the wetlands, in it's entirety, would be maintained. Let's see if we are going to be able to see if we can do that.

Chris Greenlaw: Mr. Chair, if I will, not to shift gears too dramatically, but I did find the testimony, January 22, 2013, starts on page 22 and this is testimony from Russ Slayback and the generalized, it's the last paragraph on 22. What I would like you to do is start reading there and read through the next page, but he does answer a couple of Commissioner's questions as far as, he introduced the methodology by which they developed this, how shall we say, the hydrological budget. He starts off by saying, first of all, this hydrological budget is based on a large area, typically combined by evapotranspiration, especially in the upland and wetlands, taking in as a broad average, he explains, he goes on to explain the graphs, he says a little bit more about that, secondly, that I think is important to you, he says, secondly I would like to talk about the addition of the ground water component and the hydrological budget. Now again, him being the expert, he says, what I gave Ray and his staff is data from USGS which says that on an average basis throughout the central Connecticut, USGS estimates that the average re-charge to till covered bedrock is about seven inches a years and is reduced to about five inches a year in a one year in thirty drought. So he explains specifically for this site how they, the methodology they established to determine the hydrological budget. The engineer put it together and then we ultimately had REMA evaluate this, so this is the testimony by which I would ask you to go back and read, and read what our expert has, what additional graphs and charts you may need if you don't have copies, I'll make copies available to all of the Commissioners, but remember, I am not the expert, so I'm asking you to go back to this.

Commissioner Zelek: So we have from the USGS for Central Connecticut, the measurements have to be specific. (Inaudible)

Chairman Block: Specific to this….

Attorney Boorman: He's explaining the measurements that he is using, specific to the site by using what is the generally scientific way to do that. I think….

Commissioner Zelek: I wouldn't call it measurement, I would call it calculations. There is no actual measurement.

Chris Greenlaw: And again, please read the testimony, because he does go on to talk about averages and his methodologies and what he incorporates to adjust for this, please read through it all.

Chairman Block: And again, Chris I'm going to ask you, because I want to be sure that I am not fooling myself, the fraction of the entire water sources feeding wetlands two and three, is, how substantial is this flow through the bedrock according to the information that we have been given.

Chris Greenlaw: As a licensed professional engineer, I can speak to the surface flow. We have these experts and their testimony to speak to the methodology by which they estimate the ground water flow, so I ask you to go back to the testimony, to read through the methodology, their testimony, and then the rebuttal from our expert. That's why we have the experts.

Chairman Block: Okay, but my math skills are limited and according to my calculations, the flow through the bedrock is something under ten percent, can you tell me if I'm wrong or not?

Chris Greenlaw: I myself would have to go back to the testimony.

Chairman Block: Then somebody with better math skills than me….

Commissioner Clark: How are you calculating that?

Chairman Block: I'm just applying the formula, the criteria that we heard and trying to fit some numbers together to try and come up with a percentage.

Commissioner Clark: Are you talking about a ten percent change?

Chairman Block: I'm saying that the proportion of water flow into wetlands, I'm using two as my example, the proportion of the stuff that comes down on the surface, and flows across the top of the rock, through the soil in there, and the portion that goes down into the bedrock and then traverses into the wetlands. According to my limited skills, it's something well under ten percent. That's why I said before, I didn't think it was a consequence.

Chris Greenlaw: Mr. Chairman, I just want to step back from that question for a moment, and maybe take some time to review the materials that our expert came up with and he's looking at cumulative totals, for the whole area. So I know that your question is specifically to ground water component, evapotranspiration component, in which Slayback discussed, it could have been on the overland flow component, but ultimately that is what the experts have done, they've discussed this methodology, they have discussed the procedures, they have discussed the rainfall data, and then they came up with a cumulative graph that determines how much water we are going to have post construction after these activities as compared to what we have existing.

Chairman Block: And they matched it.

Chris Greenlaw: Or greater, correct.

Chairman Block: Yes, again, that's why Mr. Bachand's comments are true, but again, in the application of it, I came up with the fact that the two experts satisfied themselves that they were matching, or as Chris says, slightly exceeding what is going in there now, from whatever fractions. So, I don't want us to be writing something that could be pointed as being as being, let's say a red herring. A false concern. I don't know, when you balance again, public comments, our experts comments, against the calculations that we have been given, I want you to think very carefully if you really want to hang your hat on that.

Attorney Boorman: And Chris is going to go through the record before the next meeting to see if he can find anything specific to that, other than the reference that I remember that was minimal. I don't recall a percentage, but I remember, whatever he can find he will bring to your attention next meeting.

Chris Greenlaw: Mr. Chairman, if I'm reading this correctly, it is saying here, that the proposed seven inches a year, which is an average, which he reduces for five inches a year, given the fact that we get forty, forty-five inches of rain total in surface flow, we can figure that percentage out, so if that is the question that you are asking….

Chairman Block: No, the question that I am asking is between the, how much of the total flow is contributing via the bedrock. That's…..

Attorney Boorman: Why don't we leave that and search through…

Chairman Block: Yes, okay, are there any other issues on the water budget.

Commissioner Paskewich: The graph that has been presented, the relationship is from year 1974, 75, to 2005.

Chris Greenlaw: Again, I have supporting documentation that Mr. Logan realized that I will make available to you. I will do that at the recess, I'll make copies of that.

Commissioner Paskewich: The precipitation may have changed from 2005…

Chairman Block: Yeah, but it's going to change anyway.

Commissioner Paskewich: But it's pertinent, it's 2013 and the precipitation has changed since 2005, and it will continue to change, so the model that has been presented isn't one hundred percent comfortable.

Chairman Block: But again, you may not be comfortable with it, I may not be comfortable with it, but the bottom line is, you don't have any data in which to declare that there is a trend either which way, we only have, you only have at best a supposition that there is a climate change occurring.

Commissioner Paskewich: I'm not speaking of climate change….

Chairman Block: Well, that's what the rain fall is….

Commissioner Paskewich: I'm looking at the rainfall, for everyday if it matches the data, you do have issues (inaudible)

Attorney Boorman: It just, to try to see if I can try to understand what you are saying, regardless of whether this project goes forward or not, the rainfall that is going to happen, is going to happen. What the experts are saying is that they are giving you graphs, at first a slight deviation and by the final they were almost right on, spot on, a little bit more coming in now, and all the experts, both sides of experts said that's good, we're good with that. That's for number two, and number three, George said he still was looking for a little more, so really, does it make any difference? But, so really does it make any difference, because what the water is, the water is, whether this project goes forward or not, if you get torrential rain, and there is a lot of rain, it's going to change the wetland anyway.

Commissioner Paskewich: But it's choosing to be dryer.

Chairman Block: But it's changing everywhere.

Commissioner Paskewich: But we're here, we're not everywhere.

Chairman Block: But I mean everywhere in Newington, everywhere in Connecticut, it's not going to, we can't protect that wetland if we can't keep our woods from drying out. We aren't a three letter committee, starting with a capital.

Chris Greenlaw: I think it's important to note that you had the experts, from the developer as opposed to our experts as far as the methodology, the resources, the data that they were going to use, and you must read through the testimony to see whether our expert debunked that, debunked the years of testing, the amount of rainfall, the area of rainfall, you know, I can speak to, in a general sense of the hydraulic or the surface water flow for the design of highways and things that we do, and as such, that is what we do, drainage is not a perfect science. What it is, is an accumulation of certain graphs and historical data that we designed for, depending on the

infrastructure, for a certain designed storm event. We all know that roads are designed for a ten year storm, houses typically aren't built in flood zones, which are hundred year storms, but we are using graphs, we're using historical data, we are pulling numbers off of a chart, from history for many years, and they're doing similar things here from their data. They're proposing, this is the data that we used, this is the methodology that we are going to use, they make assumptions about the soil types, and our expert was in concert with that. If it was to be debunked, he would have brought up his concerns over that. I think at one time he did ask about certain ground water components when they first did their calculations as he did but he went through, and when he saw errors or potential coefficients that were off as a professional he knows that, so I would go back to his testimony and read through the methodologies and read through what our expert considered.

Commissioner Paskewich: We need a bench mark with (inaudible.)

Commissioner Sadil: You mentioned the seven inches to the five inches, right? I want to speak to that. What type of buffer does that assume? We're talking about volumes here, regarding ground water into the wetlands, what area, for the seven inches of rain, the surface area of seven inches deep, does that assume a hundred foot buffer around the wetland, and that is what would hold the volume?

Chris Greenlaw: I would go back to Mr. Slayback's earlier testimony as I read to you earlier, on January 22nd, on page 21, he discusses the area, how he derives the area, and I read that to you once, but in a general sense what he is saying is that the watershed area where the rainfall is coincident within a few tenth of feet with the ground water area. That's on page 21. He says, within a few tenth of feet. And we discussed this…..

Commissioner Sadil: From the buffer, or from where?

Chris Greenlaw: No, no, watersheds are boundaries only within I think the experts described it as, we do the same thing in engineering techniques for hydraulics, because we determine the water shed from quite simply if a rain drop was to fall, following the topography perpendicular to the topographic lines to a low point, and that is why, I can bring up a map to demonstrate that to you, but it was shown, and there was quite a bit of talk, in fact I think I have one of the maps here, and we kept talking about the red line of the existing watershed that went to wetland area two, roughly, let's just say, thirteen acres and wetland three probably 2.26 acres and what happened was, in an existing sense, a certain amount of area when to these areas. Now we know it's going to be proposed, and one of the things that we didn't want, is they offered you a color coded chart showing now where the roadways are, they took that water out of the watershed and they sent it to storm water areas. Those storm water areas, the water would be treated through a treatment train and we discussed that, and then it would be outletted to a storm water system in the road. The water they took out, they had to replace with, and that's where they had different shades of green, and they would say, okay, now we are going to make up, this is one generation of the map, now they said, now they have to make up those areas that we took out for the road, and we're going to add areas from yards, but there was a consideration of possible herbicides, pesticides, fertilizers, what not, so they had to come up with mitigation efforts so therefore they brought forth and proposed the bio-swales, bio-filters, bio-retention areas. Then we got into that whole other topic of the pollutant loading that the expert had to look at. He says, okay, fine, we've satisfied water budget volume, now we've got to talk about water quality, and that's another topic that we have to discuss, but this map, this is one of the maps, the area in red, the original today that if a drop of water, this is quite interesting, if a drop of water falls very close to this line, it will run to wetland area two, versus if it is maybe ten or fifteen feet, within a few tenth of feet, it's not an exact science obviously, there's certain saturation limits of soil, what the soil is, and so on

and so forth, but I think, if a raindrop falls in this area, it's going to go to wetland three, if it falls in this area, it's going to go to wetland two. Now we have a development that comes in and we have roads, and the road cuts through the existing watershed. We don't want the road water to go into the wetland, we established that. It's good construction practice to take this to a storm water management area and through a series of treatment train, through TSS and then bring it into the road. What they did was, the area of the road, they had to make (inaudible.)

Chairman Block: I heard a different questions, and that was, where does the one inch, the five inches of rainfall come from and that is I think is a meteorological unit of measurement based upon I think it's a square foot, the amount of rain in an amount of time, so that the square footage that they are referring to is exterperlated over the area of the watershed for the wetlands, so that is where the one, five, six, seven inches come from. Am I wrong?

Chris Greenlaw: I would recommend that perhaps we table this for now and read through some of the testimony, let me regenerate some of the maps, and supporting documentation and……

Commissioner Sadil: Let me tell you why I'm picking the bone here, I'll be very honest with you, reading this report here, the ground water I think is really more important that the surface water, but reading this report, the water that goes through the ground picks up nutrients as it goes along, and goes into the wetlands, that's why certain species live on top of Cedar Mountain as opposed to somewhere else. They chose the (inaudible) of the soil, and certain characteristics versus somewhere else. So that's why I, that could really harm the wetlands and that is why I've been going around with this, if I can believe here that this development is going to be adjacent to the wetlands and it's going to impact on the ground water, I mean, this place was leveled, I saw photographs, this place was completely leveled back in 1930, yet the way it is today is because of the bedrock and all the soil that is created comes from underneath.

Attorney Boorman: I would just say, you go to the bottom line, the bottom line is that both experts are telling you that the water quality issue is resolved.

Commissioner Sadil: All right, okay.

Attorney Boorman: The pollutant loading we haven't gotten to yet, so maybe that comes in more there, but you have to have something on the record that you have to be able to justify it with.

Commissioner Zelek: You are talking water quality, (inaudible).

Commissioner Sadil: I thought, at the bottom of page 36, the bedrock, is traprock or limestone botanical diversity is further magnified. Further, she quotes…..

Chairman Block: And that is REMA's report, what's the number if our inventory, do you know.

Commissioner Sadil: I'm sorry, but it's the this one, the big one.

Chairman Block: That's sixty eight by the way, item 68.

Commissioner Zelek: What was that reference again?

Commissioner Sadil: Page 36 and 37, and states favorable edaphie conditions for rare plans appear because of the basaltic bedrock is also (like limestone) is rich in calcium minerals and weathers to form fine textured soils which makes the traprock ridges of special interest to conservationists. It goes on to the next paragraph on the next page and basically it says that high diversity is attributed to the unique geology, thin soils and variable slope and aspect of the terrain

and also to local concentrations of calcareous secondary minerals in the felsie traprock creating neutral or alkaline microhabitats. This is basically for plants not ordinarily found in the acidic soil characteristics of the region. Other plants and they specify swamp cottonwoods and other plans that were not inventoried, they could live there, that we don't know about because they weren't inventories.

Attorney Boorman: But again, that report was done on a prior project, not this one, that report doesn't say that there is anything in there that causes harm based on what is here, and in subsequent documents that REMA I think did give to us, said there is not an issue.

Commissioner Sadil: Well, one night he was inconclusive, and the next night, they made some changes and everything was fine and dandy, so that's where I'm at. That's why I'm picking on this bone.

Chris Greenlaw: Mr. Chairman, if I will, the question that I would ask, when you read that report, and you look at the plan, what has changed in the plans since that date? What has changed or not, is there a change such that it undermines those things that are good for the wetlands. That is the finding fact that you have to make. You have to read that and say, that's a good thing, and then go back to the testimony to see if this development is removing or stripping those good things from the wetlands.

Commissioner Zelek: Does it define basalt areas that are going to be disturbed?

Chairman Block: Again Chris, what is the title on that one, because I'm looking at existing versus proposed drainage on wetlands two, is that the same one? January 22, 2013 is on mine. So it is applicable.

Chris Greenlaw: Yes. It also has been superceded, I think we may see some changes. Is there anything from the 24th, I mean, they are nearly identical because I'm looking at the areas right now.

Chairman Block: Wait a minute, I talk it back, we do have grading and drainage plan dated January 24th.

Chris Greenlaw: The one that may be of greatest assistance is the plan that also shows the areas contributing to wetland three. This is all wetland two, and there is another drawing that represents the areas, pre and post to wetland area three where there was a question as well.

Commissioner Sadil: I know I have that somewhere.

Chairman Block: Well again, we have to wait for Chris to provide us with the updated information after we take a recess but I'd like to commend you, because you are putting your argument together just the way I asked you to. And with that, is there any other aspect of the water budget beyond Alan's condition, that you want to discuss, or can we go on to pollution issues.

Commissioner Clark: My question is back to when they start blasting, and they discover that you are interfering with an aquifer, and you see fractured basalt, is someone looking at that during this period? I know there is an awful lot of monitoring, but do they look at monitoring to physically assess whether ground water flow…..

Chairman Block: Well, wait a minute, one of our blasting conditions is that the seismology will be checked continuously throughout the blasting period with, according to our expert, reassurance that the margins, safety margins that we are imposing in separation distances are far greater than

the four to one ration that he calls for. Beyond that, I don't think that there is anything at all in the records that the blasting that they are proposing to do in the areas that they are talking about is going to have any ability to affect the bedrock under the wetlands.

Commissioner Clark: I'm actually not talking about the bedrock under the wetlands, I'm talking about blasting a trench, are you able to examine how deep will something go and how…..

Chris Greenlaw: As deep as almost thirty feet, and that is something you understand that, the evolution of this application and your comments that's going to most likely be changing with revisions. If this ever passes, those comments will stay with, those comments, recommendations still with this application. I can't speak for the consultant, but I can speak to you as a Commission, and they have heard you, and all the comments that you have had about the trenches cutting through the wetland areas and what might influence ground water and the watersheds and they have been listening and I know that they are working on revisions and they are looking at possible changes to sewer, but that is something that could be handled under TPZ as well. The point is, you can make these conditions. You can make exactly what you're saying for conditions. I thought Commissioner Zelek brought this up at the last meeting because I have drafted something and I believe it was from your consideration that if we have an expert, and in their view there is significant water that we think is an aquifer, that, your word Commissioner Clark, was immediately cease until it is evaluated and recommendations are offered as to an analysis, and what is this, is it out of the nature of what I expected. This is the condition that we are drafting. I believe it is the two of you who discussed, because they just are not finished at this time.

Commissioner Clark: That's looking at it from the blasting side and this is looking at the hydrology side and just kind of picturing, do we really have ground water, and do we know that we have ground water, and how much would that offset the wetlands, something flowing to the wetlands.

Chris Greenlaw: As an example, one of the things that they have done, is they have, and I believe this was part of the public hearing process, is that one of the comments that we had about the areas of blasting within the watershed, wetland two and three, is that all trenches will be sealed with like a betinite clay. Not just horizontally, but vertically at the bedrock and I can show you that in detail as well, such that ground water would be less apt to go into a trench with a restricted layer over these trenches and they have incorporated that into alternate detail for all trenches that would be in those areas, normally just horizontally, but as I said, vertically as well.

Commissioner Paskewich: Are those details being worked on now?

Chris Greenlaw: Yes.

Commissioner Clark: Well what I'm picturing is a fracture line that is allowing ground water to flow and has a lot of (inaudible), trench going right through, trench doubling the aqua flow, all the betinite in the world isn't going to change that.

Commissioner Paskewich: You can't predict, it's impossible. So you address it as it arises, that is development construction as it arises. Not everything can be addressed before it happens.

Chairman Block: With that, can we now progress to the Pollutants?

Commissiner Paskewich: Are we going to recess?

Chairman Block: Probably in another ten minutes or so.

Commissioner Paskewich: I have a lot to discuss on that.

Chairman Block: Then we will take a short recess.

Commission meeting resumed at 8:33 p.m.

Chairman Block: If I missed him before I would like to acknowledge that Dr. Phil Shapiro is, has been in attendance to the last hour and a half or more.
Chris, were you able to get some stuff together for us?

Chris Greenlaw: Yes Mr. Chairman, I just ran off for the Commissioners the items or the illustration that I have been referring to is the watershed map that is dated the 24th. I believe you should, upon inspection when you have a moment, maybe after the meeting, make sure that you have this drawing, you should have it in a smaller scale. In addition to that, I have some of the water budget notes, the documents, what I can do is to make copies of these and get them out as far as, for further review for you as well, if you don't have these as well. This is the background information that our expert utilized in the creation of this water storage.

Chairman Block: And I assume that you didn't have a chance to do any of the other calculations? So, with that, if we are finished with water budget, can we go on to pollution please? Before you do it, I'd like to divide this into two halves, one half is the project controls an the other half would be the home owners controls or limitations. So let's if it's convenient to you…..

Chris Greenlaw: Mr. Chairman, I would recommend that as far as the water quality, you might want to dissect this into its two components which is the TSS component, total suspended solids, and then the pollutant loading analysis that was done, and then as a third, maybe the home owners association as a whole other topic.

Chairman Block: Okay, so what is the total suspended solids, the TSS, the other is the chemical pollutants of nutrient values and the third is going to be the home owners association. Is that agreeable to all of you?

Commissioner Paskewich: I don't have any questions on the TSS, so I'll wait.

Chairman Block: Does anyone have anything to say against, I believe it was Mr. Logan who said, this is state of the art, it's a good as it gets for the design of the bio-swales, etc. Quite candidly, to me, I can't impose anything more that the best that we have been told about. Does anybody have any issues on that point.

Commissioner Clark: Well I would just state that, the question that I think we have to answer first, it may be state of the art, but is it good enough to not change the physical characteristics of this particular wetlands?

Chairman Block: Well the idea there is that the bio-swales will be catching the solids. We have the soils as a matrix, we have the vegetation as a bio-mat, and the question is going to be the maintenance of that over the years, by the home owners association, the third category, and the limitations and requirements for property owners not to destroy it. They are not supposed to be touching the yards anyway supposedly, so hopefully that will work. So the question is, is there anything further really that we can say about the ability of this project as to total suspended solids.

Commissioner Paskewich: I have a note here, monitoring the stations and (inaudible) will take (inaudible)

Chairman Block: Do you have the page on that?

Commissioner Paskewich: No, this is a note that I had on the map.

Chairman Block: Okay, so again, somewhere down the road if anybody wants to pursue this, let's search it out in the minutes and let's find the reference to exactly what does he say and how does he…..

Chris Greenlaw: Mr. Chairman, Commissioner Paskewich hit the fast forward button on us, but if I could just step back for a moment. Some of the things that I don't know if were clearly described to you is, what is the TSS, what are the total suspended solids, what are the recommendations? The recommendations by DEEP that comes in the form of the Connecticut 2004 Storm Water Quality Guide and which we abide to, requires eighty percent, and as an engineer, all developers when they come in, you know, we hold them to this standard. Now there's primary treatment, there's secondary treatment, we're utilizing both in this project, and that in itself is a discussion, but what it boils down to, at the end of the day, we're saying, did they achieve at least this eighty percent. We have a lot of testimony on this. One of the things that we do is, we don't have time as engineers, especially on the municipal side, we don't go out and test these secondary type treatments, and what is the secondary type treatment. That's the hydrodynamic separators that you talked about. You heard a lot of testimony on the treatment train, and I invite you to go back and look at the testimony on that, and look at what they found, look at the plans, but more pointedly, I want to stay on task with as I indicated, the State of Connecticut DOT also has, through their environmental section, they have specification on certain hydrodynamic separators and that basically is a manifold with a swirl chamber and it's based on (inaudible) law and a lot of science and what they have done is that they continually update as to what are the recommended types of hydrodynamic separators you can use, and you know that I have offered testimony on other sites that you have reviewed that one might, maybe one is better, maybe it's 82 or 84, but the problem is, when you have a list that you can pick from, I cannot dictate that. The developer will propose it as long as it is on the proposed list. But this developer has gone even farther. In addition to just a hydrodynamic separator unit they have done things as far as the whole treatment train, and it starts with the way that the water is being controlled as it enters the system. They have hoods on the outlets to reduce the flowables, they have extra deep sumps, they have the hydrodynamic separators, they have either a bio-filter, a bio-swale, or a retention area. This is why we got this exorbitant number, because you are probably thinking to yourself, why is that number greater, how did they achieve this? More specifically, don't rely on my testimony, go to the 24th, page 27, George Logan, You are relating intimate design that is being proposed, George Logan says, correct, exactly. You are going to have 91 percent TSS removal. 91 percent is greater than the 80 that is required. George Logan says, later on, he's questioned by the Chairman, and bottom line, there is no better technology to be utilized, and George Logan says, there is no better technology. But again, George Logan doesn't stop there, George Logan is our expert, on our behalf. Now we get to exactly where Commissioner Paskewich is, and to answer Commissioner Clark's question, it's quite haunting still at the 80 percent or the 91 percent or the 94, depending on which system we are looking at, is there going to be a detrimental affect on the wetland. So that is why our expert, on our behalf said, in addition to these controls which they exceed, he's recommending, and that is where the map comes in for storm water monitoring, not only during the construction, but after, and that I spoke on earlier, so that is how that evolved. So he's even taken it to the next level, so I just wanted to give you some of the reference as to what is recommended, what is the trade that we require, what they proposed through the testimony, and then ultimately what our expert has gone with, with the extra yard and to require as a condition for you to consider.

Commissioner Paskewich: I'm going to refer to REMA's January 17th, page 39, Item 10, Potential for adverse impacts to wetland 2 from stormwater toxicants; I'll just give you kind of a synopsis

from some of the paragraphs. The question that the Commission needs to consider is the likelihood that harmful stormwater conditions will reach harmful levels in Wetland 2, after discharge from the two stormwater basins. Though the loading calculations are flawed, we know that metals from road runoff, and he lists them off, will be discharged into each basin in every rain event, extending into the distant future. We also know that a substantial proportion of nutrients in residential runoff is discharged from a typical, normally functioning basin. Next paragraph, metal concentrations in basins sediments consistently reach biologically harmful concentrations per Dr. Snodgrass's recent large-scale Maryland USGS study of 68 stormwater ponds. Ninety-six percent of ponds exceeded consensus based threshold effect concentrations for at least one trace metal. I'll bypass the spectrums, the last of the paragraph is, the key question is the extent to which these constituents will exit the basins over time, reach Wetland 2 and build up to harmful concentrations. So my question to this is, as of January 17th document, how have we referred to that now in any of these…..

Chairman Block: Tell me if I'm wrong, but my recollection is, that the storm drainage from the streets is not going into the bio-swales, that this is only the runoff from the yards themselves, and if you look on this grading and drainage plan of the 24th, that was referred to, I don't know what color the line is, but there is a line at Lot #43 and Lot #44 in the front yards to collect the yard runoff and take it down to bio-swale number two. So the storm drainage itself is not supposed to be going into this, that's diverted out of the storm drainage system. But, Alan's concern about total loading of the bio-swale I think is an interesting concern to us. Anybody else have thoughts on this?

Chris Greenlaw: To answer your first question, yes. That is demonstrated again on that map, you should have a copy of, just to reiterate shows roadways within those watershed areas, that water is taken away in a controlled manner through treatment trains to storm water areas to detention basins and then attenuated, held, and then released.

Chairman Block: But not to our watershed, correct.

Chris Greenlaw: And then they make that area up through the yard areas.

Commissioner Zelek: Released to where.

Chris Greenlaw: Let me specify, this is in relation to wetlands area two. This was the original area, undeveloped today, water falls here, here, here, here, runs into the wetland. Proposed condition, a light blue, we're taking out this roadway water, in this case we are going south, and then out to the storm water management area and it will be released to weir, not wetland area two, but out this way.

Commissioner Clark: Could you repeat those last several lines.

Chris Greenlaw: Wetland area two, wetland area three, again the red area is existing today, this area contributes wetland area two, this area contributes within the red, this is wetland area one. They are going, under proposed conditions, to take the roadway drainage, and take those areas and, in this case for wetland area two, this is light blue, this would be taken out, and brought to a storm water management area, it will not go in to wetland area three, into another storm water management area, and then out to Russell Road. This roadway area that would contribute to wetland area three today, this area is taken out, is brought down to storm water management area, not into the wetland area, into the storm water management area, attenuated and out into Russell Road.

Commissioner Zelek: Where on Russell Road?

Commissioner Zelek: Inaudible

Chris Greenlaw: State drainage system. It goes into the state drainage system, may very well at some point go into their drainage systems, and into their wetland areas, but again, this roadway system is still being treated by their treatment train an extensive documented standard by DEP. Now this area here in the roadway, the light blue is the proposed roadway area that would normally take those to wetland two. This comes down thru pipes, treatment train, attenuated, slowed down, stored, and then slowly released, this water eventually will head towards wetland area one. So the water that they take out from each of the areas, they have to make up, and this is what we discussed through the water budget earlier, so what they proposed was for each area that is light blue, they brought in this area that was outside the existing drainage area that is dark blue. What they are proposing for this area is to collect the surface water, bring it down in this case through a pipe, under the road, and this is grass area, (inaudible) doesn't have to be treated, and by the way, they do, and they bring it down into this bio-retention area, in this case the bio-retention area is made up of membrane, we talked about that with the consultant, and then it will work through, it will enter as ground water, permeate the soil and then head towards, in this case, wetland area two. They have a break down exactly how to make up these bio-retention areas, and it's in accordance with what is recommended in the Storm Water Quality Manual so the roads, that's why we have this area outside of the existing area. They take the road water out and then replace it with the grassed areas and roof areas, for wetland area three and wetland area two, and that's why we got into such a discussion over the budget.

Commissioner Zelek: So one of the reasons for moving these discharges, it's not wetland two, so they are discharging into the watershed from (inaudible)

Chris Greenlaw: Correct. At one time it was on this bridge, when I saw bridge, it is more of a saddle area, and the belief was that it was too steep and it could erode the soils, so what they did was, they modified this and they brought it over to a train that was flatter and they extended this out along the property line, to make sure that this falls within the home owners association responsibility to the town.

Commissioner Zelek: The question in my mind, if (inaudible) is discharging into wetland two, why isn't there a concern about discharging into (inaudible).

Chairman Block: Because the separation distance between wetland one, with the controlled area and the distance from the discharge point is so great that it's not under our jurisdiction. It's way beyond the upland review area.

Commissioner Zelek: Is there a discharge between wetlands two and three?

Chris Greenlaw: This here, roadway goes to storm water management area and then out to Russell Road.

Commissioner Zelek: Go back to between area, go straight up, (inaudible)

Chris Greenlaw: You have two things here, you have the easement, what they tried to do, there are three things here. One of the things that Toll tried to do is they tried to, you had this cross country sanitary line, this is the line that started off about five feet deep, ten, fifteen, twenty, roughly at the center section it was approximately twenty-five feet, very deep, so what they did was, they tried to place this trench, they actually moved it, they articulated instead of just going straight and cutting through a wetland, they tried to mimic the alignment of the trench along the divide of the watershed. So again, instead of intercepting water, they tried to bring it up right where, either side of the line with intent to feed with the understanding that if a raindrop fell, it

would fall to the respective wetland area, they tried to mimic their sanitary line almost on that ridge. Again, that's from your comments, and that is why you see a change in that. They also then came back and said, well, we have this reserved area where we put in the sanitary line, we would propose you know, one of the walking trails, and that is why we see that. Thirdly, I believe what you are getting at also, to make up for the roadway, we have a grassed area shown as clear, and we have this dark area of green here, and from earlier comment that we read about as far as balancing the water budget, Mr. Logan was looking at trying to pick up Lot #8 to augment this surface area to fill in to add to the water volume for water area three, and that is the testimony that we read earlier and that was per Mr. Logan's recommendation.

Commissioner Paskewich: How (inaudible)

Chris Greenlaw: At this point, your first house, by the time you get here, just from memory, you are probably at this point, somewhere around 25. What we try to achieve as an engineer, like anything, gravity is free and it's constant, so there's a break point in economy, where you say, do I need to have a forced main and pump this with a generator and have all of the problems that go along with that, and the infrastructure, or is it worth while to dig a larger trench, have a deeper infrastructure, and have gravity as a constant, and that is kind of a break point with any development.

Commissioner Zelek: So as an alternative to a trench passing through…..

Chris Greenlaw: Well, it's not passing through the wetlands,

Commissioner Zelek: Well, between the two, is this from the east to the west, (inaudible)

Chris Greenlaw: Our expert, no, not our expert, Russ Slayback makes comments specifically that it is very unlikely that ground water moves between wetland three to two, and if you wanted to specify, I could find it for you. He does make that statement, I could point you in that area and what I recommend is that you read all around that area and try to see a basis for that.

Commissioner Zelek: I don't disagree that water doesn't go between two and three but if there is an aquifer that passes underneath three, and you may be disrupting the ground water in relation to number two.

Chris Greenlaw: I will find that statement for you, and maybe that will answer your question.

Chairman Block: We didn't delve into that issue during the hearing, but again, if there is an issue as to whether the depth of the cut between the two creates a risk, and you want to create a condition, that is require an exploration as to whether there is an alternate layout for the sewer, perhaps we can go in that direction, if you think that is significant enough to want to pursue.

Commissioner Paskewich: Could we speak to that now?

Chairman Block: Well, just add it to your list of proposed conditions as we continue to discuss this, and somewhere along the line, before we leave this topic, we'll, if something comes to mind that you want to express, as a proposed condition, present it.

Commissioner Zelek: Are you saying that the condition could be that the sewer line can't go where it's going, that pumping is…..

Chairman Block: Well again, one of the charges to the Commission in general, and to the applicant is the question as to whether or not they have explored all alternatives. You're saying that given Mr. Bachand's concerns, and your own, that the strata in the ridge between the two may have fissures in it.

Commissioner Zelek: Not necessarily fissures, in the CERT report last week, you said some sort of a substraigt.

Chairman Block: And now they are going to put in a cut that is going to perhaps go as far as twenty-five feet. That certainly is going to have some affect on the margin, the division, between the two watersheds, I think that is a reasonable assumption to make, therefore the question should be, in placing the sewer there, have they really explored if there is any other alternative? So, the condition might be, is there is an alternative that might greater protect the watershed integrity between the two?

Commissioner Clark: Does the watershed, now I'm going to ask you the same thing, does the watershed include surface water as well as ground water?

Chairman Block: Yes. As he said, that is a mater of pure gravity.

Commissioner Block: So there is going to be a sewer line in the watershed.

Chairman Block: It's proposed to be at the peak of the watersheds, the dividing line between the two.

Commissioner Clark: But if it (inaudible) and creates a twenty-five foot trench, there is no (inaudible) any more.

Chairman Block: Well there is, it's a giant U shaped. It goes up, and then it goes down to the bottom of the trench.

Commissioner Clark: How does the water then flow to the watershed…..

Chairman Block: In the 36, 48 inches of the cut, and then back into the sides, at the bottom of that trench, absence the water stops, and flows downhill. And that was what Jeff was articulating, right?

Commissioner Zelek: I just wish we had discussed this when we had, had asked if they could change the plan now, just to eliminate the risk of disrupting that (inaudible)

Chris Greenlaw: Just to answer your question, January 22nd, please write this down Mr. Zelek, January 22, page 24, the testimony from Russ Slayback, I have it noted as wetland three to wetland two, and I don't want to take anything out of context but read the testimony around those areas and he talks specifically to his professional opinion to that regard.

Chairman Block: What page number was that?

Chris Greenlaw: Page 24.

Commissioner Paskewich: The location of this trench is based upon achieving the best, (inaudible) the gravity flow, to the street to the outlet?

Chairman Block: It's to the outlet of the sewer line, from the project to the municipal system, but it's also not only the engineering end, it's also the economics of it, which is the cheapest run for them to make as well.

Commissioner Paskewich: The path of least resistance for all.

Chris Greenlaw: Then again, the consultant knew that line and in consideration of your comments, and if you think about the watershed and if the water falls on either side, much like designing drainage for a road, you don't see structures at the top of the road because we won't have any cumulative rainfall at that point, so we have a lot of rules of thumb. So that's why rather than having, if we had a slope, at any point on any slope, as the water runs down, like anything else, the greater the area, the greater the flow, so what we did, in regard to your comment about possibly intercepting, minus the mitigation efforts of the betinite clay, water horizontal and vertical stops, what they tried to do, is on that slope, the farther you go down, the greater the area, the greater the flow, that you could possibly intercept. That's why they looked at pushing that trench farther up the slope therefore less area, less potential interception of water, less volume if possible, and that was in regard to your comments, while balancing the economics of it, and looking at the alignment.

Chairman Block: Anything further? What about the other pollutants now?

Commissioner Paskewich: I spoke to the chemical, and that was addressed.

Chairman Block: And you are proposing a condition?

Commissioner Paskewich: Yes.

Chairman Block: And the condition was to monitor them?

Commissioner Paskewich: Yes.

Chairman Block: Anybody else?

Commissioner Zelek: You are talking about water quality?

Commissioner Paskewich: Monitoring as was recommended by REMA and the plan that was submitted for the stations. (inaudible)

Commissioner Zelek: (Inaudible)

Chairman Block: I like the direction, but after the project is completed and species inventory has been established, that's going to be really the obligation of the home owners association as to what is going to be done to maintain the bio-diversity of the area. One of the concerns that we spoke about was to controlling invasives, another one is going to, as Jeff pointed out before, maintaining the nutritional components, if they have to augment with fertilizer if they want to do that. Pruning, whatever else they want to do.

Commissioner Clark: What plant population are you talking about?

Chairman Block: The native plant population that is there now, that makes it a valuable wetlands.

Commissioner Clark: Well, you used the word fertilizer, and that's what kind of threw me off.

Chairman Block: Well, Alan proposed before, that if you take away the mineral transfer through the bedrock which is created the nutritional basis for the growth of these plants in the wetlands, and you take that portion out, over time, the nutrient portion in that area would be diminished. They would be starved for, let's say phosphorus, and therefore the species that required the phosphorus at that level would tend to die out. Now if you get a monitored population and you find that the trees are thinning because they lost phosphorus, in this example, and then you can throw some bone ash down, and replace the phosphorus and balance it up again. It's gardening.

Commissioner Clark: I think the probability of accomplishing that would be extremely unique for the plant population found in this extremely unique wetland goes beyond even the scope of Sigrun Gadwa to monitor that and provide the right (inaudible.)

Chairman Block: But beyond that, if you remember, George attempted to take soil samples to the lab to get the analysis of the various chemical components, and because of storms, illness and whatever we were not given that information. It's not in our record, so again, to go out in that direction would be hard to defend in the record. You'd have to do it based on generalities.

Commissioner Paskewich: I do believe that I read in the Turf Management Plan, recommendations to phosphorus and (inaudible.)

Chairman Block: But those were for the lawn areas, not for the wetlands. So, that's why, that is perhaps the basis for extrapolating to having the same concerns apply to the plants of the wetlands.

Commissioner Clark: So you are making that a suggestion….

Chairman Block: I'm just exploring, if that is a concern, how you might be able to legitimately go in that direction.

Commissioner Clark: So you are proposing a mitigation (inaudible) attempting to maintain the status quo in the wetlands as far as the suitable characteristics that may change with this (inaudible.)

Chairman Block: Right. If you have, using an animal analogy, if you have an animal in the zoo, you have to feed him a balanced diet in order to survive.

Commissioner Paskewich: I had a note here, can't reference it to an item, speaking to Dr. Clark's comment, Dr. Petrovic from Cornell, agronomy, does have the ability to look at some activity and (Inaudible)

Chairman Block: In fact, Dr. Abrams suggested that. So again, there is perhaps a basis for support going in that direction.

Commissioner Clark: So would it be appropriate to suggest a condition at this point that Dr. Petrovic, to manage this area?

Chairman Block: I don't think you can go that far in specifics but I think you might be able to say that you would like the condition for periodic testing to the nutritional components of the wetlands in regard to a target species.

Commissioner Clark: But what is the good of testing if there is no plan in front of the Commission (inaudible) a complicated condition, correct me if I'm wrong, but obviously we can't put too burdensome a condition on, so again, the proposed monitoring but I'm just making the point that

a condition of the proposed monitoring, if it is unable to (inaudible) and not good enough to keep the wetlands

Attorney Boorman: If I may, there are standard conditions that come out through the regulations there is like a monitoring condition if it doesn't meet the requirements, the sediment plan, then work stops as we talked about before, so, obviously they are not going to stop the project, but they have to come back and address the issue as was talked about in the construction situation. Same thing happens with construction, something that was not anticipated on paper, they stop, they come back and talk to staff, and staff may be able to address it and they can move forward, or it may be something of substance that would have to come before the Commission.

Commissioner Clark: So the conditions can be imposed that control the construction, what kind of conditions, if any can be imposed that can address future degradation of the wetlands?

Attorney Boorman: All conditions have to be reasonable and have to be based upon the record and if you are going to look to go in that direction, you would want to look to your expert's recommendations that are both in the record and (inaudible.) I will tell you still though, and I know that you don't want to hear this again, please be careful in terms of the expert's recommendations to those areas that are labeled, he labeled ecology versus the natural characteristics because some of the conditions that you (inaudible) now, in my opinion, are not enforceable and it's my job to sit here and tell you that, and you are going to do what you want to anyway, which is fine. But I would say to you, you would want to follow the same procedure that we talked about, that is, get them into wording that gets us to a place that is potentially (inaudible.)

Chris Greenlaw: I believe last week, one of the meetings, Condition E that I prepared for you, I'd like to reflect back, and if you don't have this sheet, I can make copies and hand it out, but I directly speak to developer's HOA provide a copy of the Integrated Turf Management Pesticide Plan to the Conservation Commission Agent in accordance with the following, and I list eight things, and again, these are a guide, kind of get the juices flowing, and I want your interpretation and I have eight different things in here, in reference to Cornell, agronomy lab, and put together this plan, and therefore again, I would say, please reflect on this and the testimony. Add to it, subtract from it and eventually we can throw it over the fence to the attorney and just work with legalese to what we can make stick to the best of our abilities, but I've only put in eight different things in here and certainly amongst all of the Commissioners and all of your concerns, we add to this, so if you don't have this, and this is a living document, I just keep adding to this, so I'll give you the copy that I have now, and as I work on this over the weekend, there are going to be more, and please look at this and add to it.

Commissioner Paskewich: I have a question to the retention basin and (inaudible) notes. The maintenance notes, thinking about the current snow bank, brought to my attention this afternoon, I'm looking at the 2004 DEEP Storm Water Quality Manual and it states, never store snow in bio-retention areas. I don't see that in the maintenance (inaudible) and wondered if that could be added in as a condition.

Chairman Block: It could be, but again, understand that the bio-swales that feed our wetlands are located in back yards…..

Commissioner Paskewich: This is bio-retention.

Chairman Block: Yes, but the ones that feed our wetlands are in people's back yards.

Commissioner Paskewich: I'm looking at bio-swale seven, and that doesn't appear to be in anyone's back yard. It's actually to the side of 48, adjacent to Russell Road.

Chairman Block: Yeah, but that one is feeding into the storm drain system on the state highway again. So that's not going to our wetlands.

Chris Greenlaw: Mr. Chairman, either way, it's just a condition and it's probably just good practice as far as not trying to overload one part of your treatment train with, we all know that right now people are looking for places to put snow, and use different environs, currently Newington uses a calcium chloride, but this Home Owners Association, if they were to use sand, or any other agents, why would we want to chance it. I mean, it's a just a condition that we can add, just to ensure good practice.

Chairman Block: As long as it's in our mandate, fine. I just don't want to get hung up with something that can be argued as not within our jurisdiction. Anybody else? Seeing none, I would like to propose one, and again, the argument for this is, within the language of the recent court decisions that the physical characteristics of the wetland in my mind do include the vegetation, you can physically see it, touch it, and so on and therefore the vegetation is a concern. It is a general accepted truth that pollution harms biotic, and will harm the trees and therefore will affect the physical characteristics. Therefore I would like to propose a condition of periodic testing of the bio-swales for pollution levels, for the chemical loads and to replace and repair them when they reach a level that is seventy-five percent of the toxic level for the swamp cottonwoods. What I am saying there is, as was discussed before the state standard is that there is a certain percentile of the chemicals entering the bio-swales which will not be caught, eighty percent, ninety percent, whatever. Over a period, if you are talking about the load that is generated in one year, if you multiply that by the percentage, if it's eighty percent, that means in five years, a one year's load would be going directly to the wetlands. If you are talking ninety percent, it's ten years, a one year's load would be going into the wetlands. The question is, is a one year's load of that particular toxin, pollutant, whatever, enough to harm the physical characteristics by destroying vegetation. I propose a condition that would call for the periodic testing of the bio-swales to determine how much of a load they are getting and for them to be maintained, repaired and replaced. When seventy-five percent of that toxic load has accumulated in the bio-swale. To the extent that the bio-swale attenuates i.e., destroys that toxic, that pollutant, it would just extend the life span of the bio-swales. Any discussion?

Commissioner Igielski: How can you redefine the term wetland that is expressly defined within our regulations? You (inaudible) to include all species of plant life?

Chairman Block: I am saying, and I said this before, that in my mind, my view, the definition used by DEEP and the regulations that they have created as a control (inaudible) include the biotic, the living elements, which is beyond the geology and beyond the mere presence of water.

Commissioner Igielski: I just have trouble understanding how when you just said (inaudible) the wetlands definition in our regulations.

Chairman Block: If you recall, if you look into it, I think one of the definitions in some of the parts of it actually refers to the presence of certain species. It's not the definition used in the recent judicial decisions. But, I cannot in my mind and in my heart reduce the wetlands to the presence of a mere puddle, and I, if you disagree with me, then vote against the condition, that's fine, but I cannot envision that the State of Connecticut wanted to protect the mere existence of a puddle.

Commissioner Clark: Did we talk about, didn't the Goodspeed Court case refer in part to vegetation being part of the physical characteristics?

Chairman Block: There was a cutting, but I don't know if that was through wetlands.

Attorney Boorman: As we talked about in the presentations that I have done for you, there is no provision under any court finding that plant life is protected as a physical characteristic and it does not meet the definition of wetlands, despite the fact that plants are mentioned in that section of the statutes, during review called a secondary effect, so both plant life and animal life are the same. It is not considered a characteristic. Having said that, I understand, I've talked to the Chairman about this before, I understand, but it's not (inaudible).

Commissioner Zelek: What characteristics is it that the court considers?

Attorney Boorman: It really is the definition of a wetland dealing with soils. Soils are the characteristic. It doesn't deal with animal species, or plant life, I gave you handouts that actually define it, exactly how the court ruled.

Commissoner Igielski: Mr. Chairman, I don't necessarily disagree with you, in fact I do agree with you, but this is something that the legislature would have to take up and conclude and redefine what a wetland would be.

Chairman Block: Excuse me, no. I would argue with you to the extent that the restriction and the definition is not the function of the legislature, which has by creating the statutes and the regulations, and if you read the preamble to the statute, they very specifically talk to the ecological value of these areas. It is this one judicial decision which has narrowed it down to this absurd level, and although I don't wish to cause trouble for the Town, or expense, I cannot throw the baby out with the bathwater. I have to express my concern that we are talking about the value of the wetland as they, as they constituted into society, and the court, quite frankly, is taking too narrow a view. I think that both experts on both sides have told us repeatedly that consideration of the biotic components of this area is of concern to them, and I think we should have every right to follow.

Commissioner Paskewich: Chairman Block, are you speaking to the natural bio-diversity of (inaudible).

Chairman Block: Yes, and it's uniqueness. Sigrun said it fourteen different ways, this is a very special area because of these swamp cottonwoods, now under Federal legislature we are supposed to be protecting them, I can't image the fact that at the federal level we, they say the nation should, and at the state level, the court says, no we can't. It does not make sense to me.

Commissioner Clark: Mr. Chairman, did you review the Riversound case that preceded the Avalon Bay case?

Chairman Block: That's with the salamanders?

Commissioner Clark: Yes.

Chairman Block: Yeah I did, and the problem there is in my view is that the testimony was to the one species. And the court said, one out of many, cannot be utilized to protect the whole. But her we have two different things, we…..

Commissioner Clark: No, no, the Riversound case actually upheld, it went to appeal at every level and ruled in favor of the inland wetland commission, in fact it was in our minutes, Mr. Logan referred to it as the preserve case, and the preserve case equaled this Riversound case. It did precede the Avalon Bay case, but when I went to read it, there was a little different direction from

what I thought they were talking about. Anyway, so legally it did precede it and then came Avalon Bay had trumped it per se, but there are issues in that case that speak, I think, to what you are talking about.

Attorney Boorman: As I indicated, Avalon Bay and Riversbend are the two pre-eminent Supreme court cases that have set the standard for all cases at this point. Now does that mean that it can't be changed in the future? It doesn't. Courts can change their mind. But I've also put out that the legislature has not since those cases, gone back and changed anything under the definition to make it more advantageous for the plants under that situation. I would suggest for the purpose of a condition, as indicated by the Chairman, that Chris notate that, put it down on the list, and like everything else, we'll do an analysis of all the conditions. The Chairman seems pretty adamant about it, so that is something that we can discuss again.

Commissioner Clark: Could you just say that again so we can chew on it?

Chairman Block: Yes. That there be periodic testing of the bio-swale systems for the pollutant loads and that when those loads reach seventy-five percent of the toxic level that the bio-swales be replaced and repaired in order to maintain the functionality.

Commissioner Clark: Who is deciding the toxic levels, of what organisms?

Chairman Block: I referred it to the swamp cottonwoods as a reference species, as the most valuable.

Commissioner Clark: I was just wondering, is there a way to measure that, the toxic, do we have to define the toxic, do we have to define the affect on the organisms?

Chairman Block: No, I think that is a matter of research and record at this point as to how much it, you know, of anything is too much, and that I will leave to them to determine.

Attorney Boorman: Can I just recommend that you leave that for now. Those are good questions, we can continue to ponder and maybe as time goes on, if that is going to be included in the list, we can further kind of flesh that out.

Chairman Block: Anything else on pollution?

Commissioner Clark: The pollution issue is just so huge, that I almost don't dare to touch it. Let's say, you touched on one aspect of it, as to measure one organism….

Chairman Block: No, the effects on one organism.

Commissioner Clark: Correct, then my question is, monitoring in the future as to, do these things build up, where do they go and what does all the equipment, how long does it last. I know we brought this up before, but to me it has never been answered, successfully. All things break down and in trying to create a situation where you are going to protect something that has been there for a very long time, using human engineering that, although I have the greatest respect for it, breaks down a lot faster than the environment that has been there a long time.

Chairman Block: All you can do is use your minds and think of the most rational approach to deal with it, and that's what I do. I took the elements of this, what we were told, and the fact that somebody needs to keep track of it, because it's not one hundred percent, and at some point in time, is going to have to be repaired. It's going to have to be dealt with. If it is going to maintain that efficiency, that's all we can do.

Commissioner Clark: Exactly.

Commissioner Paskevich: Reading, and as you were saying, these bio-swales, these bio-detention, these separators, that have been introduced in this development, are current, state of the art, best practices that (inaudible).

Attorney Boorman: And the experts agree, in terms of what is on the record. It still doesn't mean that you can't put in a condition, and maybe your discussion here you know how to word that, you don't necessarily reference, perhaps it is something for the monitoring and maintaining of more so than (inaudible.)

Commissiner Clark: I'd like to make another statement on pollution. So we talked about the piece of equipment that keeps in check the measurable train of pollutants, but again, one of the hugest issues here is, the unknown human factor as all these challengers are brought in with their (inaudible) all of the rules that they are supposed to follow, how are pollutants measured, does someone measure the pollutants in the water that might be banned pollutants. Let's say our conditions say, you can only use a certain kind of snow melt, in this development. Is someone going to come along and check if there is a different kind, I don't know how it works in engineering, but I know in medicine, if you know that a dog has been poisoned, we can't just (inaudible) for what poison. You have to say, is lead there? Is arsenic there? You can't just do a global test, you've got to say, I'm looking for such and such. Is someone using a banned pesticide? Is someone using the wrong kind of salt which is easy, just do down to the hardware store and buy that salt and use it on your driveway, and say, that works better than the stuff the homeowners association has approved. I think those are the issues, how do we have the checks and balances. They all have to be included in the home owner's documents that, when are we going to get to see that, or do we write the conditions into our conditions so they become part of the home owners documents, what comes first, the chicken or the egg here?

Commissioner Paskewich: I think that was spoken to by Mr. Logan, when he talked about what products, recommendations, so I would (inaudible).

Commissioner Clark: For there, but how do we monitor, does someone monitor the surreptitious use of banned products?

Commissioner Paskewich: I would think at some point that there would be some kind of contract, to get that perhaps in writing that that would be done.

Chairman Block: Well, let me toss this out, as part of that contract, I would presume, if you will, an appendix containing approved products, including fertilizers, pesticides, whatever this landscape people would be using throughout the entire project. If you would like, a condition might be generated where they would have to submit that appendix to us periodically, let's say it's a three year contract, or five year, or so on, and then as the second part of your question, as you proposed, if an animal is being poisoned, the first thing you do is you review the symptomolgy to try and see what toxin could create those affects. Same way with a, in this case. I think the signal would be whether or not something is dying in the wetlands, and then based upon what it is, they would start an investigation as to where it might have come from.

Commissioner Clark: Who is they?

Chairman Block: Well, in this particular case it's going to be either the home owners association, policing their own business, or it's going to be the town through some citizen complaining, which is true of every wetlands in town.

Commissioner Clark: But again, the swamp cottonwoods, in particular only thrive there and very few places that (inaudible) and I think that anything ending up in there, it's likely, and I think that is a fair term, I don't……

Chairman Block: You are butting your head against what is practical. Come up with something that you think if practical, and let's discuss it. I don't think it is a bad idea if you can do it. Anybody else? Nothing else, let's go on to the home owners? Any ideas there, we are making progress. It's getting late.

Attorney Boorman: Distinguished staff members, just announced that it is Chris' birthday.

Chairman Block: Anything further? Do we want to get into home owners now or have you had enough?

Commissioner Clark: Mr. Boorman might be the guidance at this point at a future meeting on the home owners, because I think at this point, the problem is the whole homeowners issue is the (inaudible) It is possible to have the home owners association, how do you address, we did have a statement by Mark Branse, they do have something on the record, which you pointed out, as the Chairman pointed out, when he pointed out the home owners association in Wethersfield had disbanded, and then the person who spoke from the Watershed Association, and she also commented on how people could be throwing trash out of the back. I don't think that is a real stretch to picture that, especially things like grass clippings, so I guess my question is some guidance on how do you use, I guess it's just common sense, to get people to behave, other than making conditions.

Attorney Boorman: Well, I do suggest that you read the declaration that came over. That, when we come back next time, and I think it's a good idea that we wait till next time, I suggest that you do address those conditions, like the amount of money you were concerned about, we can talk about those things, in more specifics the next time. I do think conditions are important and part of the conditions are that you can insist on certain things being inserted into that agreement. The reason that Wethersfield through Attorney Branse is satisfied right now is because the documents that he prepared he put in a provision that it is not just the homeowners association that has the ability to take action, but also the Town of Newington and the Town of Wethersfield. So when associated with violations, it allows a cause of action for the towns, as well as the home owners association, so that provides an additional layer, so we can get into the more specifics the next time we address those concerns and see what you want to do, but I think conditions should give way to whatever it is that you are concerned about, that should be included in the home owners association. I guess the ultimate question that you are asking is that can you control all individuals in all aspects of life years from now, blah, blah, blah and the answer I think is as your are correctly putting out, is that you cannot. So I would say to you again, I don't think that is from a legal perspective, what you jurisdiction area is, and what is allowable in this type of case in terms of supposition. Now you used the word likely earlier, that's based on your own personal knowledge of human beings and certainly you can use that in making your decision to a degree, but again, because of the nature of this application, and not in the upland review, outside, talking about conditions of the physical characteristics of the wetland, it's a much higher standard than you asserting jurisdiction over whatever happens there. That's why this application is unique, we don't usually have this situation where you are looking to, and case law talks about it, you are not here to be a mini environmental protection agency. This goes back to some of the comments that your Chairman is making about the trees. You don't have jurisdiction. The court is quite clear on that, and especially with this kind of case you don't. So that is the only one that we are really talking about, this case right here. Having said that, that's why I try to ground everything in the record. Conditions are good, if you are going to go in that direction to include the home owners

association, up to a point, but they are not going to correct everything or anticipate everything that might happen.

Chairman Block: So with that, how about we close this session and everybody think about it. Everybody put their thinking caps on and come up with whatever conditions you would like to impose regarding the home owners association.
Chris, what is the next date?

Chris Greenlaw: The next date is next Tuesday, the 19th, as part of our regularly scheduled meeting, and that will be in L101 at 7:00 p.m.

Chairman Block: As part of that agenda, the tail items will be if we have any time to continue these deliberations. Is that alright with everybody?

VI. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

Gail Bedrako, 21 Isabelle Terr: I promise I'll be brief, and this is not an agenda item. I'd like to comment just very briefly on the process on the public participation, and from civics class and from doing research, the primary purpose of having public participation is that it generates ideas, it raises questions, and provides other information to a Commission or an agency charged with making an important decision. The public is not paid experts, but they do have experience and they do have education, and the input should be used as an additional tool according to the legal experts that can provide a different lens to look at expert testimony not only that has been provided but also what's (inaudible) and why. You limit the consideration strictly to the input of one, two, or three experts, does a tremendous disservice to the Commission or an agency. It limits their ability, it doesn't allow them to extrapolate and draw conclusions based on the wealth of information, using their innate intelligence and their ability to connect the dots for all the information that they have been given to draw conclusion. If a commission or agency, is strongly advised or invited to minimize input or knowledge gained from sources outside of one, two, or three experts, the public hearing process is hindered and the agency or commission cannot do their job. It jeopardizes the integrity of the entire public hearing process. Thank you.

Chairman Block: Thank you.

VII. COMMUNICATIONS AND REPORTS

None.

IX. ADJOURNMENT

Commissioner Sadil moved to adjourn the meeting. The motion was seconded by Commissioner Paskewich. The meeting was adjourned at 9:46 p.m.

Respectfully submitted,

Norine Addis,
Temporary Recording Secretary